

Solomon, Terrance

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MyDate=Mon Mar 14 19:56:28 EST 2005

submitto=STIC-EIC3700@uspto.gov

Name=William Matthews

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Serialnum=10809991

PatClass=128/898

Earliest=3/27/2000

Format1=paper

Searchtopic=see claims 1-17.

Comments=

send=SEND

8/3,K/1 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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12126022 Genuine Article#: 733BT No. References: 27

Title: Radio-frequency thermal ablation with hypertonic saline solution

injection of the lung : ex vivo and in vivo feasibility studies

Author(s): Lee JM (REPRINT) ; Youk JH; Kim YK; Han YM; Chung GH; Lee SY;

Kim CS

Corporate Source: Chonbuk Natl Univ, Dept Diagnost Radiol, Sch Med, Chonju//South Korea/ (REPRINT); Chonbuk Natl Univ, Dept Diagnost

Radiol, Sch Med, Chonju//South Korea/; Seoul Natl Univ Hosp, Dept Diagnost Radiol, Seoul 110744//South Korea/

Journal: EUROPEAN RADIOLOGY, 2003, V13, N11 (NOV), P2540-2547

ISSN: 0938-7994 Publication date: 20031100

Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Radio-frequency thermal ablation with hypertonic saline solution

injection of the lung : ex vivo and in vivo feasibility studies

Abstract: The aim of this study was to assess the effects of simultaneous

instillation of NaCl solutions during **radio - frequency** ablation (RFA) on the dimension of the ablated lesion in ex vivo bovine lung

tissue and in vivo rabbit lung tissue. The RFA was induced in ex vivo

bovine lung tissue which was inflated with room air and in vivo rabbit

lung tissue by a 500-kHz **RF** generator and a 17-G cooled-tip electrode. In in vivo experiments, RFA was performed using CT guidance.

The **RF energy** was applied for 5 min with or without instillation of

0.9 or 36% NaCl solutions. The changes in tissue impedance, current, power output, and...

...of tissue impedance (>100 Omega) and corresponding increase of current

flow occurred in both ex vivo and in vivo studies. This experimental

study demonstrates that **RF** ablation with simultaneous NaCl solution

infusion of the lung is more effective in achieving coagulation necrosis than conventional RFA procedure.

17/3,K/1 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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13518249 Genuine Article#: 890JQ No. References: 32

Title: Complications after percutaneous saline -enhanced radiofrequency

ablation of liver tumors: 3-year experience with 336 patients at a single center

Author(s): Giorgio A; Tarantino L; de Stefano G; Coppola C; Ferraioli G

(REPRINT)

Corporate Source: Viale Marconi 41/I-84013 Cava Tirreni/SA/Italy/

(REPRINT)

; D Cotugno Hosp, Intervent Ultrasound Serv, I-80131 Naples//Italy/(
ferraiol@tin.it)

Journal: AMERICAN JOURNAL OF ROENTGENOLOGY, 2005, V184, N1 (JAN),
P207-211

ISSN: 0361-803X Publication date: 20050100

Publisher: AMER ROENTGEN RAY SOC, 1891 PRESTON WHITE DR, SUBSCRIPTION
FULFILLMENT, RESTON, VA 22091 USA

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Complications after percutaneous saline -enhanced radiofrequency

ablation of liver tumors: 3-year experience with 336 patients at a single center

Abstract: OBJECTIVE. Our objective was to report the complications that

occurred in a large series of patients with primary or metastatic liver

tumors treated with percutaneous **saline** -enhanced radiofrequency ablation under sonographic guidance at a single center during 3 years of experience.

SUBJECTS AND METHODS. Between September 2000 and October 2003, 336

...

...institution using radiofrequency ablation. Of these patients, 287 had

hepatocellular carcinoma from cirrhosis, 47 had liver metastases (38

from colon, six from breast, two from **lung** , and one from cutaneous

melanoma), and two had primary cholangiocarcinoma. Adverse events related to radiofrequency ablation were prospectively recorded.

RESULTS. The number of sessions performed...

...Identifiers--SMALL HEPATOCELLULAR-CARCINOMA; UNRESECTABLE

HEPATIC-TUMORS; TISSUE **ABLATION** ; **THERMAL ABLATION** ; ETHANOL **INJECTION** ; METASTASES; ELECTRODE; NEEDLE; TEMPERATURE; MANAGEMENT

17/3,K/2 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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10491044 Genuine Article#: 534UC No. References: 19

Title: The patient with cancer: Management through a pinhole

Author(s): Adam A (REPRINT)

Corporate Source: St Thomas Hosp, Dept Radiol, 1st Floor Lambeth
Wing, Lambeth

Palace Rd/London SE1 7EH//England/ (REPRINT); Univ London, Guys
Kings &

St Thomas Med Sch, Dept Radiol, London WC1E 7HU//England/

Journal: DRUGS OF TODAY, 2002, V38, A, P49-59

ISSN: 0025-7656 Publication date: 20020000

Publisher: PROUS SCIENCE, SA, PO BOX 540, PROVENZA 388, 08025
BARCELONA,

SPAIN

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: natural orifices can improve the quality of life of
patients

with malignancy, and may offer the prospect of cure.

Interventional

radiological procedures include drainage of **fluid** collection,
venous

access techniques for chemotherapy and intravenous feeding,
neurolysis,

intra-arterial infusion chemotherapy, embolization, tumor ablation
and

the use of metallic stents in various...

...relief of obstruction of the gastric outlet and colon. Many
patients

with spinal metastases have severe pain, which can be difficult to
control. The percutaneous **injection** of methyl methacrylate under
combined fluoroscopic and CT guidance stabilizes the involved
vertebra,

preventing further collapse and offering excellent pain relief in
approximately 80% of patients. Chemoembolization has made a
contribution to the management of patients with hepatocellular
carcinoma but appears less effective in metastatic disease.

Methods of

percutaneous **ablation** include cryotherapy, and **thermal
ablation**

with laser and radiofrequency. Percutaneous techniques are usually
carded out under CT, ultrasound or MRI guidance. The initial
results

are encouraging and further technical refinements...

...Identifiers--PERCUTANEOUS ETHANOL **INJECTION** ; EXPANDABLE METALLIC
STENTS; HEPATOCELLULAR-CARCINOMA; LIVER-TUMORS; TRACHEOBRONCHIAL
TREE;

ESOPHAGEAL-CARCINOMA; **LUNG** -CANCER; OBSTRUCTION; PLACEMENT;

ABLATION

17/3,K/3 (Item 3 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

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08369473 Genuine Article#: 277RA No. References: 30

Title: Treatment of VX2 liver tumor in rabbits with 'wet' electrode mediated radio-frequency ablation

Author(s): Miao Y; Ni Y (REPRINT) ; Mulier S; Yu J; DeWever I; Penninckx F;

Baert AL; Marchal G

Corporate Source: KATHOLIEKE UNIV LEUVEN HOSP, DEPT RADIOL, HERESTRAAT 49/B-3000 LOUVAIN//BELGIUM/ (REPRINT); KATHOLIEKE UNIV LEUVEN HOSP, DEPT

RADIOL/B-3000 LOUVAIN//BELGIUM/; KATHOLIEKE UNIV LEUVEN HOSP, DEPT SURG/B-3000 LOUVAIN//BELGIUM/; KATHOLIEKE UNIV LEUVEN HOSP, DEPT PATHOL/B-3000 LOUVAIN//BELGIUM/; NANJING MED UNIV, DEPT ABDOMINAL SURG/NANJING//PEOPLES R CHINA/

Journal: EUROPEAN RADIOLOGY, 2000, V10, N1, P188-194

ISSN: 0938-7994 Publication date: 20000000

Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Abstract: Radio-frequency ablation (RFA) has been considered as an alternative therapy for liver tumors. A 'wet' electrode with interstitial infusion of hypertonic **saline** was tested for the RFA of liver tumor in rabbits. Seventy-eight liver tumors (circle divide 1.5 to 3.0 cm) were induced in 41 rabbits by VX2 carcinoma implantation. Fifty-one tumors in 27 rabbits were treated with RFA. Under Laparotomy, the RF energy was delivered while 5% **saline** was infused through the electrode into the tumor at 1 ml/min. Six rabbits with 12 tumors were treated with only intratumoral 5% **saline** infusion without RFA. Another 8 rabbits with 15 tumors received sham operation as untreated controls. The efficacy of the therapy was evaluated with survival rate

...

...found free of viable tumor at the moment when they were sacrificed (relative eradication rate 44.4%); 9 rabbits showed local tumor relapse and/or **lung** metastasis 2-10 weeks after ablation (re-current current rate 33.3 %). In control groups of **saline** infusion and sham operation, all 14 rabbits died within 3 months (mortality rate 100%).

Three-month survival rates between RFA group and control groups were...
...Identifiers--RADIOFREQUENCY TISSUE ABLATION; PERCUTANEOUS ETHANOL
INJECTION ; INTENSITY FOCUSED ULTRASOUND; LASER-INDUCED
THERMOTHERAPY;
HEPATOCELLULAR-CARCINOMA; **THERMAL ABLATION** ; NEEDLE ELECTRODE;
METASTASES; THERAPY; CANCER

17/3,K/4 (Item 4 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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06843948 Genuine Article#: ZW093 No. References: 25

Title: Contrast enhancing agents in ultrasonography: Clinical applications

Author(s): Campani R (REPRINT) ; Calliada F; Bottinelli O; Bozzini A;
Sommaruga MG; Draghi F; Anguissola R
Corporate Source: UNIV HOSP,IRCCS, POLICLIN SAN MATTEO, INST RADIOL, P
GOLGI 2/I-27100 PAVIA//ITALY/ (REPRINT)
Journal: EUROPEAN JOURNAL OF RADIOLOGY, 1998, V27, 2 (MAY), PS161-S170
ISSN: 0720-048X Publication date: 19980500
Publisher: ELSEVIER SCI IRELAND LTD, CUSTOMER RELATIONS MANAGER, BAY
15,
SHANNON INDUSTRIAL ESTATE CO, CLARE, IRELAND
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: pericardium, peritoneum and so on) ones. Echocontrast agents

can: (1) create or improve an acoustic window; (2) distend some organs
and fill them with a **liquid** , with homogenous attenuation of the
ultrasound beam; (3) displace the air-containing intestinal loops;
(4)
depict the walls, the shape and the contours of a normal or
abnormal
cavity; (5) detect abnormal communications, fistulas and
drainages; and
(6) evaluate the amount of **fluid** in the pleural, pericardial or
peritoneal cavities. As for vascular applications, this domain
sees the
highest number of echocontrast agents on trial or on the...
...and the vascularity of upper and especially lower limbs of renal
vessels. Tumor macrovasculature (and in the future, hopefully
microvasculature) can also be studied in **parenchymatous** and/or
glandular organs, as well as in intra- and extra-abdominal
parenchymatous organs in the periskeletal soft tissues. Clinical
validation has also been obtained in the follow-up of tumors
submitted
to **ablation** therapy (chemoembolization, ethanol **injection** ,
thermal
ablation) and in echocardiography, both for morphological
studies in

the cardiac cavities and for the cardiac wall perfusion.

Conclusions:

In a subgroup of 513 out of...

?

37/3,K/3 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0009560002 BIOSIS NO.: 199598027835

**Lung tissue may be injured when radiofrequency energy catheter ablation
is performed on the free atrial wall**

AUTHOR: Kongsgaard E (Reprint); Foerster A; Aass H; Madsen S; Amile J P
AUTHOR ADDRESS: Inst. Surgical Res., Dep. Pathol., Rikshospitalet, Oslo,
Norway**Norway

JOURNAL: European Heart Journal 15 (ABSTR. SUPPL.): p387 1994 1994

CONFERENCE/MEETING: Joint XIIth World Congress of Cardiology and the XVIth
Congress of the European Society of Cardiology Berlin, Germany September
10-14, 1994; 19940910

ISSN: 0195-668X

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation

LANGUAGE: English

**Lung tissue may be injured when radiofrequency energy catheter ablation
is performed on the free atrial wall**

DESCRIPTORS:

17/3/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014844953 **Image available**

WPI Acc No: 2002-665659/200271

Related WPI Acc No: 1998-557204; 1999-419226; 1999-457984; 2000-105837;
2001-015541; 2001-060736; 2001-159342; 2001-243621; 2001-564303

XRPX Acc No: N02-526627

Asthma treatment involves application of energy from e.g. RF energy
source to airway wall of lung such that diameter of airway is increased

Patent Assignee: BRONCUS TECHNOLOGIES INC (BRON-N); DANEK C J (DANE-I);

KEAST T (KEAS-I); LAUFER M D (LAUF-I); LOOMAS B (LOOM-I)

Inventor: DANEK C J ; KEAST T; LAUFER M D ; LOOMAS B

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020091379	A1	20020711	US 99296040	A	19990421	200271 B
			US 99436455	A	19991108	
			US 2000535856	A	20000327	
			US 2001999851	A	20011025	
CA 2400276	A1	20030425	CA 2400276	A	20020919	200333
AU 2002301390	A1	20030612	AU 2002301390	A	20021004	200455

Priority Applications (No Type Date): US 2001999851 A 20011025; US 99296040
A 19990421; US 99436455 A 19991108; US 2000535856 A 20000327

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020091379	A1		9	A61B-018/18	CIP of application US 99296040 CIP of application US 99436455 CIP of application US 2000535856
CA 2400276	A1	E		A61B-018/04	
AU 2002301390	A1			A61B-018/08	

? show files;ds

File 347:JAPIO Nov 1976-2004/Nov(Updated 050309)

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File 350:Derwent WPIX 1963-2005/UD,UM &UP=200519

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Set	Items	Description
S1	7	AU='DANEK C J'
S2	9	AU='BIGGS M'
S3	27	AU='LOOMAS B'
S4	42	AU='LAUFER M D'
S5	26	AU='KAPLAN G'
S6	1	AU='SHRINER K'
S7	88	S1:S6
S8	51298	LUNG? ? OR ASTHMA? OR PULMON?
S9	8332	EPITHEL?
S10	0	PARYNCHYMA?
S11	921	PARENCHYMA?
S12	28	S7 AND S8
S13	9204	S9 OR S11
S14	3	S12 AND S13
S15	3098503	TEMPERATUR? OR HEAT?? OR RADIO?(3N)ENERGY OR RF
S16	12	S12 AND S15
S17	11	S16 NOT S14
S18	8396	S8 AND S15
S19	317	S13 AND S18
S20	316	S19 NOT S7
S21	3495090	REDUC? OR STABILIZ? OR STABILIS?
S22	417111	S21(S)S15
S23	41	S20 AND S22
S24	731936	FLUID? ? OR SALINE? ?
S25	13	S23 AND S24
S26	1569240	TREAT????
S27	288	S20 AND S26
S28	141735	(CONTROL???? OR S21) (3N)TEMPERATUR?
S29	1	S27 AND S28
?		

? show files;ds

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File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/Feb W3
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Set	Items	Description
S1	2124076	INJECT?
S2	4994401	FLUID? OR SALINE? OR LIQUID?
S3	2033433	LUNG? ? OR AIRWAY OR AIR()WAY OR PARENCHYMA?
S4	863	S1(5N)S2(5N)S3
S5	35469	(RF OR RFE OR RADIOFREQUENC? OR RADIO()FREQUENCY)(S)
ENERGY		
S6	5861946	TEMPERATUR?
S7	3	S4 AND S5
S8	1	RD (unique items)
S9	7065	THERMAL?(5N)ABLAT?
S10	15672	S1 AND S2 AND S3
S11	97427	S1(5N)S2
S12	3255	S11(S)S3
S13	3	S5 AND S12
S14	10	S10 AND S9
S15	10	S13 OR S14
S16	5	RD (unique items)
S17	4	S16 NOT S7
?		

? show files;ds

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File 73:EMBASE 1974-2005/Mar W3
(c) 2005 Elsevier Science B.V.
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File 441:ESPICOM Pharm&Med DEVICE NEWS 2005/Feb W2
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Set	Items	Description
S1	1716480	LUNG? ?
S2	339190	AIRWAY? OR AIR()WAY? ?
S3	7492644	TEMPERATUR? OR HEAT???
S4	4861998	ENERGY OR RADIO()FREQUENCY OR RF
S5	17345504	CONTROL???? OR REDUC??? OR STABILIS? OR STABILIZ?
S6	2732806	SALINE? OR FLUID?
S7	15599021	TREAT???? OR THERAP?
S8	1932270	S1 OR S2
S9	676977	S7 AND S8
S10	1055708	S5(S)S3
S11	69953	S6 AND S10
S12	584	S9 AND S11
S13	77411	INJECT?(5N)S6
S14	2829	S13(S)S8
S15	32	S7 AND S10 AND S14
S16	12	RD (unique items)
S17	214032	ABLAT???
S18	2279475	THERMAL?
S19	14813	(S3 OR S18) (5N)S17
S20	2967	S4(S)S19
S21	144	S6 AND S7 AND S20
S22	142	S21 NOT S15
S23	73	RD (unique items)
S24	3872011	PY=2001
S25	4045477	PY=2002
S26	4256558	PY=2003
S27	3939050	PY=2004
S28	499456	PY=2005
S29	38	S23 NOT S24:S28
S30	48	S14(S)S10
S31	18	RD (unique items)
S32	7	S31 NOT S15
S33	8573	S4(3N)S17
S34	158	S8(S)S33

S35	133	S7 AND S34
S36	27	S35 NOT S24:S28
S37	15	RD (unique items)
?		

Howie

(FILE 'HOME' ENTERED AT 15:19:21 ON 11 APR 2005)

FILE 'HCAPLUS, MEDICONF' ENTERED AT 15:19:35 ON 11 APR 2005

L1 12012 S INJECT?(5W) (FLUID# OR SALINE OR LIQUID#)
L2 78 S L1(S) (LUNG# OR AIRWAY# OR AIR()WAY# OR PARENCHYMA?)
L3 145 S THERMAL?() ABLAT?
L4 965 S (RF OR RFE OR RADIOFREQUENC? OR
RADIO() FREQUENCY) (4W) ENERGY
L5 0 S L2 AND L3
L6 0 S L2 AND L4
L7 0 S L1 AND L3
L8 0 S L1 AND L4
L9 0 S L3 AND L4
L10 69 S L2 AND PY<2002
L11 0 S L10 AND L4
L12 584144 S TEMPERATUR?
L13 1 S L10 AND L12
L14 542784 S FLUID# OR SALINE#
L15 210620 S LUNG# OR AIRWAY# OR AIR()WAY# OR PARENCHYMA#
L16 2 S L14(S) S15
L17 16437 S L14 AND L15
L18 2694 S INJECT? AND L17
L19 0 S L4 AND L18